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April 19, 1989

Mr. Dan Duncan
Program Engineer
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, WA 99352

Dear ~~Mr Duncan~~ Dan:

Re: Questions on the Savannah River and West Valley Vitrification Plants

Enclosed you will find a list of questions which I would like to address on my May 1-3, 1989 tour of the vitrification plants in Savannah River and West Valley. This list is intended to help DOE and WHC plan for my visit.

From this tour, I hope to gain a better understanding of the structures and processes associated with the Hanford Waste Vitrification Plant (HWVP); thus enabling a more thorough, effective, and timely review of the HWVP Part B permit application.

Thank you for helping to arrange my tour.

Sincerely,

Mike Gordon

Mike Gordon
Hanford Project

START

QUESTIONS ON THE DESIGN AND OPERATION OF THE SAVANNAH RIVER AND WEST VALLEY VITRIFICATION PLANTS

To be discussed during the May 1-3, 1989 tour of these facilities
Submitted by Mike Gordon, Washington Department of Ecology

1. Describe how the treatment/storage tank systems and their associated operating procedures at Savannah River and West Valley will perform the following functions:

   a) secondary containment
   b) leak detection (methods, frequencies, and parameters detected)
   c) spill response
   d) corrosion protection
   e) integrity assessment (leak tests)
   f) remote inspections
   g) remote maintenance

2. Describe how the off-gas treatment systems and their associated operating procedures at Savannah River and West Valley will perform the following functions:

   a) particulate removal
   b) treatment of NOx, SOx, NH_3 and other gaseous emissions
   c) air monitoring (methods, frequencies, and parameters detected)
   d) response to process upsets
   e) response to failure of emission control systems
   f) maintenance and replacement of control devices

   I would like to review manufacturer specifications on emission control devices, and the results of air monitoring conducted during trial runs at both plants.

3. What are the waste analysis procedures for waste feed streams at the Savannah River and West Valley vitrification plants? These procedures should describe the following:

   a) sampling method, location, and frequency
   b) parameters analyzed
   c) reference feed composition
   d) operating limits for key constituents

4. What processes will be used to analyze, treat, and dispose of secondary waste streams? I would like to concentrate on mixed waste streams similar to those which are likely to be produced by the HWVP.

5. What are the procedures for handling and storing the vitrified waste canisters? These procedures should describe the following:

   a) hazardous waste designation of the vitrified waste
   b) canister inspections
   c) response to canister failure
   d) disposition of vitrified wastes which do not meet waste acceptance criteria set by the high-level repository

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Subject Questions On The Savannah River and West Valley Vitrification Plants

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